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ROCKS and MINERALS

A Magazine for Mineralogists, Geologists and Collectors

Official Journal of the Rocks and Minerals Association

DECEMBER, 1942

Vol. 17, No. 12 **25c** *Whole No. 137*

THE ROCKS AND MINERALS ASSOCIATION

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Organized in 1928 for the increase and dissemination of mineralogic knowledge

To stimulate public interest in geology and mineralogy and to endeavor to have courses in these subjects introduced in the curricula of the public school systems; to revive a general interest in minerals and mineral collecting; to instruct beginners as to how a collection can be made and cared for; to keep an accurate and permanent record of all mineral localities and minerals found there and to print same for distribution; to encourage the search for new minerals that have not yet been discovered; and to endeavor to secure the practical conservation of mineral localities and unusual rock formations.

Ever since its foundation in 1928, the Rocks and Minerals Association has done much to promote the interest in mineralogy. It has sponsored outings, expeditions, formations of mineralogical clubs and the printing of many articles that have been a distinct contribution to mineralogy.

Those of our readers who are members of the Association can rightly feel that they too were sponsors of these many achievements that have helped to give mineralogy a national recognition. Among your friends there must be many who would like to have a part in the Association's work—to share with you the personal satisfaction, the pleasure, and the benefits of membership. Will you give your friends this opportunity to join the Association by nominating them for membership?

Each new member helps to extend the Association's activities—helps to make your magazine larger, better, and more interesting, and above all assists in the dissemination of mineralogical knowledge.

Some advantages of memberships: All members in good standing receive:

(1) **Rocks and Minerals**, a monthly magazine. (2) A member's identification card that secures the privileges of many mines, quarries, clubs, societies, museums, libraries. (3) The right to participate in outings and meetings arranged by the Association. (4) the right to display a certificate of membership and to place after their names a designation indicating their membership or to advertise membership on stationery, etc. (5) The distinction and the endorsement which comes from membership in the world's largest mineralogical society.

Mineralogical clubs which subscribe for **Rocks and Minerals** also become affiliated members of the Rocks and Minerals Association and enjoy the advantages which such an affiliation affords.

A number of clubs hold membership in the Association, participate in the annual outings, and co-operate in many ways in furthering the aims and ambitions of the Association.

Affiliation with the world's largest mineralogical society cannot fail to increase membership, enlarge circles of acquaintanceship, and stimulate a keener interest in mineralogy.

A list of affiliated clubs will be found among the back pages of the magazine.

ROCKS and MINERALS

PUBLISHED MONTHLY

Edited and Published by PETER ZODAC

December 1942

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ROCKS and MINERALS PEEKSKILL, N. Y., U. S. A.

The official Journal of the Rocks and Minerals Association

Chips from the Quarry

AN R. & M. A. ARMY

A few day before we were to go to press, an airmail letter arrived from Frank Glasser, of Gray, Idaho, instructing us to change his address in our files and informing us at the same time that he was in the U. S. Army—a sergeant in the Air Corps. This brought up some very pleasant memories. Hundreds of Rocks and Minerals Association members are now in the armed service of the country—in the army, navy, and marine corps. We do not know in what branch of service the large majority of members belong as we neither asked nor kept a record. No doubt the army has most of them. A few names of those whom we know to be in the army are as follows:

Privates:
Joseph Cilen, of Hawthorne, N. J.
John M. Grieger, of Pasadena, Calif.
Jno. G. Newell, of Wilson, N. C.
W. L. McFarling, of Lincoln, Nebr.
W. Harold Printz, of Newport, Ore.
Leo Neal Yedlin, of Cedar Grove, Me.

Corporals:
Sidney A. Fine
George Molnar, of Perth Amboy, N. J.
Richard M. Pearl, of Denver, Colo.
Norman Thompson, of Chico, Calif.

Sergeant: Frank Glasser, of Gray, Idaho

Lieutenant:
Leo Komiakoff, of Poughkeepsie, N. Y.

Captains:
William Bingham, of St. Paul, Minn.
Martin L. Ehrmann, of New York, N. Y.
John J. Livingston, of Elizabethtown, Ill.

Majors:
L. Prescott Brown, of Albany, N. Y.
John A. Sawyer, of Manhattan, Kans.
J. G. Shinkle, of Aberdeen, Md.
Clarence M. Jenni, of Festus, Mo.

Lt. Colonel: Charles J. Bondley, Jr.

Brig General:
J. S. Hatcher, of Falls Church, Va.

Most of these members are well known in mineralogical circles—Ehrmann, Grieger, Pearl and Printz were dealers; Bingham, Brown, Hatcher, and Yedlin had a number of interesting articles printed in ROCKS AND MINERALS.

We have reason to believe that a large part of our members are already on foreign soil—in Australia, Solomon Islands, North Africa, and elsewhere and giving a good account of themselves. Although the chances may be very slim, we also know that many of them will be on the lookout for minerals—some have assured us that they will. We know of one instance where a member, on the day he was leaving for the army, was ganged up by a group of collectors and very strenuously instructed that be-

(Continued on page 407)

Peter Zodac

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Whole No. 137

ANTARCTIC EXPEDITIONS

By DUNCAN STEWART, JR.

Lehigh University

The Antarctic Continent is isolated from other great land masses of the earth, and is practically encompassed by a broad girdle of deep ocean. The total area is estimated to be 4,500,000 square miles, of which the greater part is covered by ice, and only in the peripheral region and in lofty ranges of mountains are rocks exposed.

Captain James Cook, during his voyages of 1772-1775, was the first to cross the Antarctic Circle, 66° 30′ South, on January 17, 1773. A Russian expedition, 1819-1821, under the leadership of F. von Bellingshausen, on January 22, 1821, sighted the first land ever seen within the Antarctic Circle—Peter I Island. Antarctica was discovered by a youthful American sea captain by the name of Nathaniel B. Palmer, of Stonington, Connecticut, on November 18, 1820. Palmer made the voyage in a 45-ton sloop which acted as a tender for a sealing fleet. The name Antarctic Continent was given by Lieutenant, afterwards Admiral, Charles Wilkes, of the United States Navy, to the stretch of coast line which he skirted through sixty degrees of longitude, 100°-160° E., since known as Wilkes Land. The importance of Wilkes' discovery was not so much in finding mainland near the Antarctic Circle but in proving that the land had continental dimensions.

The British have long been interested in Antarctic exploration, and when early in the nineteenth century much attention was being given to the science of terrestrial magnetism, James Clark Ross commanded an expedition to discover the South Magnetic Pole. In 1841, Ross pushed his way in his clumsy sailing ships through the floating ice south of New Zealand into an open sea which now bears his name. He did not discover the South Magnetic Pole, but he did discover South Victoria Land and Ross Island with its two lofty volcanoes, Mounts Erebus and Terror. Mount Erebus is an active volcano, and rises 13,200 feet above the Ross Sea. To Mr. C. E. Borchgrevink is given the credit of being the first to land on the Antarctic Continent, on January 24, 1895. Borchgrevink was the commander of the *Southern Cross* Expedition, 1898-1900, and it was he who spent the winter of 1899 at Cape Adare, South Victoria Land, the first instance of wintering on the Antarctic Continent. The British National Antarctic Expedition, 1901-1904, under the leadership of R. F. Scott, made extensive studies in South Victoria Land. E. H. Shackleton, leader of the British Antarctic Expedition, 1907-1909, succeeded in reaching latitude 88° 23′ South—almost the South Pole. The next great British Expedition, was that of the *Terra Nova*, 1910-1913, again under Scott. The feat which will live longest in memory was the great march of Scott and his four companions to the South Pole, which they reached on January 17, 1912. Meanwhile, Roald Amundsen had reached the Pole in December, 1911. The tragedy of the return, involving the death of the whole of Scott's polar party, is a story everyone should read. Shackleton's attempt to cross the Antarctic Continent, on his ex-

pedition of 1914-1917, was a failure, but valuable information was obtained in the area of the Weddell Sea. Again, in 1921-1922, there was another British expedition, known as the Shackleton-Rowett Expedition, to the South Atlantic and the Weddell Sea. The most recent was the British Graham Land Expedition, 1934-1937, which made studies in West Antarctica, under the leadership of John Rymill. This expedition proved conclusively that Palmer Land is a peninsular mass and not an archipelago of islands as formerly believed.

Important researches were carried on in the Weddell Sea area by the Scottish National Antarctic Expedition, 1902-1904, under the command of W. S. Bruce.

The Swedish Antarctic Expedition, 1901-1903, under Otto Nordenskjold, made important contributions to the knowledge of the northeastern area of Palmer Land and nearby islands.

The Norwegian South Polar Expedition, under the leadership of Roald Amundsen, is best known for its attainment of the South Pole in 1911. Their base camp was in the vicinity of Byrd's Little America. Beginning in 1926, the Norwegians, under the directorship of Lars Christensen, initiated a seasonal program of Antarctic exploration. These expeditions led to the discovery and mapping of vast stretches of coast line to the south of the Indian and Atlantic Oceans.

The scientific results of the Belgium Antarctic Expedition, 1897-1899, under Adrian de Gerlache, are a credit to that country. Their studies were carried on in western Palmer Land and nearby islands.

There have been three French expeditions, the first of which, under the command of J. S. C. Dumont d'Urville, 1837-1840, was in Antarctic waters at the time of Wilkes' United States Exploring Expedition. D'Urville discovered Adelie Land, the future base of the Australasian Antarctic Expedition. The studies of Jean Charcot and his colleagues, during the Expeditions of 1903-1905 and 1908-1910, were carried on in the general region of West Antarctica explored in part by de Gerlache some years before.

The expeditions sponsored by the Germans are well known. The German South Polar Expedition, 1901-1903, under Erich von Drygalski, carried on its work in the African Quadrant of the Antarctic. During 1911-1912, Wilhelm Filchner commanded another expedition, this time in the Weddell Sea area. The latest was the German Antarctic Expedition, 1938-1939. Operations were carried on in the sector of the zero meridian, and thousands of square miles were photographed from the air. The Norwegians had already surveyed the coastal sections, so there are conflicting claims of territory—neither the first nor the last of controversies of polar sovereignty.

Douglas Mawson commanded the Australasian Antarctic Expedition, 1911-1914, the studies of which are of great scientific value. The operations were carried on in King George V, Adelie, Queen Mary, and Kaiser Wilhelm II Lands. The reports of the British-Australian-New Zealand Antarctic Expedition, 1929-1930, again under Mawson, deal with studies in the African Quadrant, more particularly those in Enderby and MacRobertson Lands.

The English-speaking peoples know very little about the First Japanese Polar Expedition, under the leadership of Shirase. The first polar expedition attempted by the Japanese was probably the least expensive one as well as the smallest in history. They encamped, in 1911, near Amundsen's base on the Ross Shelf Ice, but because of the great handicaps encountered they gained little knowledge of the Antarctic.

The first expedition from the United States since that of Wilkes was that conducted by R. E. Byrd in 1928-1930. During the fourteen months of the expedition's sojourn in the Antarctic two achievements were noteworthy—the flight to the Pole on November 28 and 29, 1929, and the long sledge journey of L. M. Gould and his companions to the Queen Maud Mountains and return during which time considerable areas were mapped and much geological data were

collected. The Wilkins-Hearst Antarctic Expedition, 1928-1929, did considerable aerial photography in West Antarctica. The Second Byrd Antarctic Expedition, 1933-1935, had its base once again on the Ross Shelf Ice. Vast areas were mapped from the air and land surveys were carried on in the Rockefeller, Edsel Ford, and Queen Maud Mountains. The trans-Antarctic flight of 2,200 miles, by Lincoln Ellsworth and H. Hollick-Kenyon, November 23-December 5, 1935, crossed the entire length of West Antarctica from Dundee Island to Little America. The United States Antarctic Service Expedition, 1939-1941, established two bases, one near the site of Little America, and one in West Antarctica. Preliminary reports on the scientific results are forthcoming in the near future in the *Proceedings of the American Philosophical Society.*

In concluusion, it might be said that our present knowledge of Antarctica has been due to the researches of men of many nations, and although there have been many expeditions to the "Sixth Continent," we still have much to learn. In a succeeding article the author will briefly discuss the geology of Antarctica.

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VUGS FOUND AT GREAT DEPTHS!

By M. H. GIDEL, Geologist

Butte, Mont.

Vugs are cavities or pockets, often lined with crystals, in rocks. Regarding the depth to which vugs or their contained crystal aggregates occur, I am sure no one can definitely answer. Vugs or cavities are more numerous in the zone in which surface waters migrate, for instance in some limestone caverns (enlarged vugs) which have been explored for great distances and to extreme vertical depths of several hundred feet. Such vugs, cavities, or caverns are usually lined with secondarily formed minerals such as aragonite or calcite. Vugs in veins are found to the greatest depths so far obtained in mines (4,000 feet or more), and I doubt that man will ever be able to dig deep enough to reach the bottom of the zone wherein vugs or cavities cease to exist. Pegmatitic vugs lined with crystals of quartz, feldspar, corundum, tourmaline, beryl, etc., are found in such deep-seated rocks as granite and gneiss, the depth of which in the geologic column may reach 50,000 feet more or less, depending on their relation to overlying rock formations in any particular area. It is my belief that vugs may even develop in the so-called deep "zone of rock flowage" (gneiss and schist in the upper portion) in the natural openings which must develop in same as the result of the accumulation of water vapor and gases held within the hot slag-like rock material or magma.

Such cavities would be receptacles for mineral-bearing gases or solutions under high pressure, and which, upon cooling and solidifying would permit the development of minerals in crystalline form. For example, cassiterite. The finding of hauynite, vesuvianite, sulphur and other minerals in vugs of material (volcanic bombs) thrown out of volcanoes suggest this possibility.

In the veins of the Butte District, small vugs have been noted on all levels to 4,100 feet depth, with no observed decrease in same at greater depths. Of course, in the upper oxidized zone to 200 or 300 feet depth, "honeycomb" structures are common due to the dissolving out of the original sulphide minerals, and oftentimes the development of druses of secondary quartz, gypsum or calcite coatings on gossan or brown limonitic material.

THE ELUSIVE STATES

By MRS. A. C. MORRIS

Greenfield, Mo.

Born and reared in the foothills of the Ozark Mts., in southwestern Missouri, where rocks abound, it is not strange that I soon acquired a keen interest in rocks and minerals. I remember as a child breaking what I now know to be encrinal limestone to see what I could find—and stringing the "rings" for beads, picking up the curious, or the "shiny" rock. Many years later I began bringing home a rock as a souvenir—from places I visited—with no thought of a collection.

Finding I had rocks from 27 of the States of the Union, I decided to add the rest—but how? I was not acquainted with mineral dealers then as now, from whom most every variety of mineral may be purchased and from every state and country. I noticed an advertisement in some periodical "Pebbles from Everywhere" and at once an order went out to the Gem Exchange, at Lake Bluff, Ill., requesting specimens from the needed states. I had a great thrill when the package arrived and I found seven different specimens from seven different states.

My ardor was growing by leaps for the others and for more varieties. Not long after this I found I had all but four states —Nebraska, North Dakota, Delaware, and Rhode Island—represented in my collection. Friends had sent me specimens from Louisiana and Mississippi.

I wrote a friend in Nebraska and received one of my most prized specimens —a pebble that had been carried as a lucky piece by Dr. Richard Tanner (Diamond Dick)—for 57 years—with a history of its travels. It was a white quartzite which he had picked up in Nuckolls County, Neb.

From a map of Rhode Island I picked a small town near the sea, and then directed a letter to its postmaster with a request that it be given to a responsible high school girl. The letter was explanatory and I enclosed a coin to cover exenses and a little extra. In less then two weeks I received a very cordial letter from two girls and an 8 oz. package of hand-polished New England pebbles (all different). I find people so anxious to help!

Lately a catalog from the Indian Museum of Osborne, Kans., resulted in the acquisition of some Indian specimens from the two remaining states, a brownish-gray chalcedony arrowhead from Pleasant Hill, Del., and a white flint arrowhead from the old fort near Fargo, N. D.

The geographical part of my collection is now complete but *not* my collection which has grown to be a thing of beauty —with many countries represented and many varieties of rocks and minerals.

My chief joy is a collection containing at least one specimen of every rock, mineral, and gem mentioned in the Bible. Next are the many unseen friends I have made and the names of all who have contributed to the collection in any way. Every one is registered in my mineral album—"How the collection grew".

AN R. & M. A. ARMY

(Continued from page 402)

fore banging Hitler or Tojo over the head with a gun, he was to grab each by the throat and demand to know if he has any minerals and where they may be hidden.

Our best wishes are extended to these brave Americans! We are proud of them all! It is an honor in having them members of the Rocks and Minerals Association!

A COLORADO VACATION

By J. E. ANDRESS

For one who is accustomed to the grain lands and prairies of Illinois, it is refreshing to visit the State of Colorado, especially in the fall of the year. Then not only are the mountains and snow covered peaks inspiring, but as September closes, the aspens and other shrubbery take on those marvelous colors ranging from green through yellow, orange and burnt orange to red producing a charm of color, particularly when viewed from the 9,000 to 10,000 ft. altitudes, as the blending of colors leads right up to the timber line.

To one interested in rocks and minerals, even though a novice and by no means a mineralogist or geologist, there is much of fascinating and intriguing interest in the midst of mountains, mines and valleys.

This fall we spent five delightful weeks (away from hay fever) visiting Central and Eastern Colorado (leaving the Western section for a later visit).

The people of Colorado are real human, cordial and treated us with more consideration than one would expect. Motor Courts afford modern accommodations.

It was interesting in driving west out of Denver on U. S. 285 to see and be guided by so many heart-shaped signs put up by the very energetic Secretary, Wilbur B. Foshay, of the Salida Chamber of Commerce.

In the Salida, Central Colorado territory, through the recommendations of Mr. Foshay, we visited several fluorspar mines, were well received and generously rewarded with all the specimens we could carry. These fluorspar specimens varied from crystals to crystalline and many banded, all of which fluoresce most beautifully under all three types of my ultra-violet lamps.

We also secured beryl crystals chiseled out of the feldspar quarry owned by Mr. Tom J. Doyle of Salida, who also owns fluorspar and hematite claims in the nearby mountains. He treated us most cordially and generously. The feldspar was of the pink cleavage microline class, and associated with it quartz and mica. Most interesting was the imbedded beryl hexagonal greenish crystals, some of which we were able to secure. Hematite specimens were of brilliant black or specular variety.

We also visited the old Sedalia copper mine and secured some weathered garnets at the place described by Frederick A. Brown of Des Moines on page 204 of the June, 1942 issue. We purposely took that copy of ROCKS AND MINERALS with us. At this old mine we also secured a splendid specimen of pectolite, radiated and stellated.

In the Leadville and Canon City Royal Gorge districts we secured various other specimens (exclusive of the great variety of rock formations) including galena crystals and clusters, dolomite, iron pyrites of all kinds and forms, cubical crystals, plain and striated, also quartz almost as pink as rose quartz. We were also given fine specimens of alabaster found in the northern part of the state.

At Grand Lake few minerals are found, but the country there abounds with igneous rocks such as giant granite or pegmatite, in which mica, quartz and feldspar occur, particularly in the North Branch Canyon of Clear Creek and along the *shelf* highway to the irrigation tunnel now being blasted through granite schist under the Continental Divide for 13½ miles to Estes Park district. The water from Grand Lake and as impounded by two dams in the Granby Valley, will irrigate 800,000 acres of Colorado on the east of the Rocky Range. Cost estimated at $54,000,000.

In the Cripple Creek historical gold mining district, many mines are still active. Here we were friendly received at the mines and given specimens of gold and silver ore and the tellurides, calaverite and sylvanite. Also secured a beautiful specimen of fluorite isometric crystals, twinning and containing some gold.

At Florissant we visited the petrified forests and were given small specimens of petrified redwood. In Manitou Springs, we secured an aragonite cluster at the Cave of the Winds, Garden of the Gods. Also found gold ore specimens as shipped from the mining districts.

Here we visited, through the auspices of the Colorado Springs Chamber of Commerce, the Gold Cycle Mill and learned much about how gold is recovered from the ore.

En route from Estes Park to Boulder via Lyons on route 66, the cuts for the stream level road blasted out of sides of mountains revealed abundance of feldspar, microcline and oligoclase with mica, biotite, and some quartz.

Idaho Springs was a most interesting headquarters, for here gold was discovered in 1859 on the present cite of the Placer Inn. There are many ghost mines and mills and prospectors' holes and the ghost town of Apex at 10,000 ft. elevation, entirely abandoned with exception of perhaps one family. Other former boom towns nearby are Georgetown, Blackhawk and Central City. Adjacent to this last named village is the "richest square mile in the world". Several gold mines there are still active even at 9,000 ft. elevation.

Near Apex fine specimens of bornite were picked up from an old gold mine dump. Some of these specimens displayed inclusions of actinolite. This bornite is now being milled for its copper.

Iron pyrites are very prevalent in all gold ore here. Beautiful cubical crystals are also found and at certain places amethyst crystals and clusters are secured. The Ruth gold mill in Idaho Springs was also found interesting and instructive.

The writer too learned much about placer mining after meeting Mr. R. D. Stotts actively at work near Blackhawk (10 miles up a beautiful canyon from Idaho Springs). The placer method of recovering gold must be very intriguing.

We could scarcely have taken a more pleasant and beneficial vacation.

REPORT ON THE TITANIUM MINE AT TAHAWUS, N. Y.

By PAUL E. KILLINGER

The Titanium mine at Tahawus, N. Y., is unique due to the fact that thirty years ago it was opened up for the iron content of its ore but the titanium impurity rendered the ore too difficult to smelt. Now it is worked mainly for the titanium and the small vanadium content of the ore.

A ten mile strip of hard surfaced highway has been built at a cost of six hundred thousand dollars to connect the mine with the state highway above Minerva. Construction of a railroad from North Creek to the mines is expected to begin at any time now.

Tahawus is in the southwestern part of Essex County, in Northeastern New York.

Due to the strict control of the mine by the Army, I consider myself privileged to have seen the small parts of the refinery and the mine that I did.

The ore is taken out of an open cut mine situated about a half mile from the refinery, loaded into trucks and taken to the large crushers where it is reduced to small lumps. It is then passed into a cylindrical barrel-shaped machine which is revolved until the ore is fine enough to work its way out between a tiny crack in the door. The grinding in this machine is done by a group of large steel rods, about four inches in diameter, which are replaced every twenty-four hours due to the rapidity at which they wear down from the revolving motion and contact with the hard ore. The dustlike ore is then spread over the riffles of one of the hundred or more shaking tables. Water is then run over these tables and carries with it the impurities.

The concentrates are then dried and loaded into bins which very closely resembling grain elevators, to await shipment to the refineries at St. Louis and in New Jersey where these vitally needed, metals of war are extracted.

SOME NEW YORK CAVES

By ANTHONY W. THURSTON

Many of us have often visited the commercialized caverns of New York State, but how many are aware of the many small caves scattered in those areas? These small caves are never large enough to interest the general public but for the amateur geologist they are a world of exploration and study.

Although I am entirely an amateur at cave exploration, nevertheless it has proved to be a most fascinating hobby. There are apparently two types of caves, both of which probably have a close connection in their original formation. The first, and more common, is entered by descending through a sink hole to the cavern below. The second, the fissure type, opens directly into the face of a ledge or cliff; this may be a lower outlet for water running into the depression around a sink. However, in no instance have I observed this connection. (In New York the fissure type cave is more common).

Origin of Caves

A cavern formed below a sink hole usually shows the work of great quantities of water. The sides of passageways are round and smooth with numerous potholes along the sides. These passages open out at various intervals into larger rooms, formed by the breaking off and dissolving of large blocks of limestone. With the evidence of the large sinks and water-worn galleries, it is quite probable that these caverns formed exits for the melting ice of the retreating ice sheets. Today, most of their lower regions are filled with water, and probably it is in these sections that the glacial waters found their exit in some passage long since filled in with clay.

The second type of cave is almost always very small and occurs along a joint in the limestone; it shows evidence of only small quantities of water and seldom opens up into rooms. The sides of these are ribbed horizontally along their entire length showing that they are the result of a stream which has cut deeper and deeper into the cave floor, working rapidly during the wet seasons and slowly during the dry. Thus they have their beginning in a small crevice, gradually being worn downward and outward, making room for more and more water. This gives the walls of the cave a shape like an inverted V.

Formations found in Caves

As a group the small New York caves do not have great quantities of lime deposits (large stalactites and stalagmites) in them now. They have probably existed in fairly large numbers at one time, but thoughtless people have carried most of them away as souvenirs. The following observations were made in one or more of the caverns visited:

Stalactites. These were found in nearly all the caves but always in small pencil-like specimens. Usually found in the most remote regions of the caves.

Stalagmites. None seen except where a stalagmite and a stalactite had joined to form a column. Many fine examples may be seen, however, in any one of the commercialized caves.

Flowstone: This is often called travertine and is very common in all caves. It sometimes occurs as a coating on the walls and loose masses of rock; at other times it occurs as a cement binding stones and gravel into a conglomerate. In some instances sink holes become filled up with stone, clay, and soil, which after a time become cemented into solid rock by flowstone.

Potholes: These occur in nearly every cave along the sides of passages and in large "boulders." They vary from 2 to 6 inches in depth and from 4 to 8 inches in width.

Fissure Caves

Haile's Cave: This cave is in John Boyd Thacher Park, town of Berne, Albany Co. A sign in the park directs one to the top of the Helderberg Cliff. Descending the ladder the visitor follows the path north to the mouth of cave. The entrance is very small and it is necessary to crawl for about 20 feet; then the roof rises slowly until after about 50 feet the distance from floor to ceiling is 5 feet. At this point a passage leads off

to the right. One can crawl for 10 or 15 feet where further exploration is stopped by a growing stalactite. Further on in the main passage a seam along the roof widens out until it forms the whole cave from one side to the other. From this point on, the height is sometimes over 25 feet, but generally it is about 2 feet. On an average, during the dry season, one can penetrate the cave for half a mile, crawling most of the way.

The geographical location of the cave is 42° 39′ N. Lat., and 74° 01′ W. Long.

Gallupville Cave. This is also a fissure cave, located just east of the village of Gallupville, Schoharie Co., on the left side of the road past the second bridge. This cave should be visited during the very dry season for there is always a stream of water running through it. Boots must be worn when visiting it and most of the time the pools are two feet deep. The unusual features here are two small travertine dams holding back the water and forming the deep pools. An unusually fine stalactite also can be seen here, but the water is too deep to get up close to it conveniently.

The geographical location of the cave is 42° 40′ N. Lat. and 74° 12′ W. Long.

Becker's Cave. Located in the cliff just east of Schoharie, Schoharie Co. It is also a fissure cave, but one long passage shows the work of much water, bearing out the theory that both fissure and sinkhole caves have a common origin. This is a rather difficult cave to explore due to the fact that one has to crawl over loose stones except in the single room about 30 feet in. A short passage, known as "fat man's misery," leads off at this point whereas the main corridor continuues on for another 100 feet ending at a small lake. It has been said that at one time Becker's Cave contained large quantities of stalactites, but today this has all been removed.

The geographical location of the cave is 42° 40′ N. Lat. and 74° 18′ W. Long.

Sinkhole Cave

Ball's Cave: Located on Barton Hill near the boundary between Schoharie and Duanesburg, Schoharie Co. This is the only typical sinkhole cave visited and is probably the best known of these I have mentioned, for it is famous for its travertine dams. Entrance is through a sink to a depth of 47 feet, then a climb down over "boulders" for another 25 feet; from this point separate passages lead to the right and to the left. It is to the right that the lake and dams are found, where a float of some sort must be used. To the left a small hole leads into a large passage and then into an immense rotunda. This is probably one of the largest rooms to be found in any New York caves. It is nearly filled by a great heap of clay, still its size is enormous. From here a series of passages and rooms continue on for another half mile.

The geographical location of the cave is 42° 43′ N. Lat. and 74° 16′ W. Long.

COLLECTOR'S KINKS

Preserving Deteriorative Specimens

Some minerals deteriorate or tend to crumble due to lack of moisture, such as laumontite, or to too much moisture, such as halite. To preserve these minerals, spray them with or dip them into a solution made by dissolving a 10c tube of Duco cement into two ounces of acetone. The solution also tends to stick together loose particles of some fragile minerals.

I have tried this solution on laumontite, halite, kernite, meyerhofferite, etc., and it has worked wonderfully.

John Albanese,
U. S. Navy.

SOME GEM STONES OF NORTHEASTERN CALIFORNIA

By B. L. HANDLEY
Clio, Calif.

To the mineral collector, some of the northeastern counties of California are a veritable paradise for specimens. Many fine specimens have been and are still being found at numerous localities within Madoc, Shasta, Lassen, Butte, Plumas, Yuba, and Sierra Counties. These counties lie astride the Sierra Range of mountains like a huge saddle blanket with their eastern edge lying out on the desert and their western edge well down on the foothills and partly in the Sacramento Valley.

California "diamonds" (quartz crystals) have been mined in Butte County since early days and thousands of dollars worth of them have been sold. These interesting crystals have been found scatteringly in many streams flowing into the Yuba and Feather Rivers. They are especially numerous along the North, and particularly the Middle Fork of the Feather River. Many of these crystals have been cut from various localities that bear a very close resemblence to a high-grade diamond. So far they have been mined commercially only at Cherokee, in Butte County.

Fine specimens of opal (of the Australian variety) have been found near Dunsmuir, Siskiyou County, and very recently a new discovery has been made by Ray West, about 3½ miles north of Clio, in Plumas County. This occurrence is on the property recorded as the Laura Quartz Mine. The mine was worked for gold, some years ago, but is now idle. In the latter discovery, they are fire opals, exceedingly hard and some of good color. They occur as "beans" in an iron cascalho or matrix, from which they must be removed with extreme care and some skill to avoid damage.

Wood opal of gem quality has recently been discovered about 10 miles north of Clio by Carl Rachel.

Idocrase, a green gem stone, also occurs here. It is quite an interesting stone but very rare. It occurs about 7 miles east of Clio on the W. P. R. R. property. Unfortunately for the collector, this property is "closed" for the duration of the war.

Jade, agate, jasper and other semi-precious gem stones are of common occurrence and in good quality throughout the above counties. Strange to relate, there is not even one commercial lapidary in the area.

BARYLAMBDA, ONE OF THE EARLIEST LARGE MAMMALS

A practically complete skeleton of Barylambda, an extinct mammal, which when it lived 50,000,000 years ago in west-central Colorado attained a development entitling it to be rated as one of the most heavily-built animals of all time, has just been placed on exhibition in the hall of paleontology at Field Museum of Natural History, Chicago, Ill.

"Barylambda was unlike and unrelated to any present-day animal," states Bryan Patterson, acting curator of paleontology, who led the expedition which excavated the remains of the rare creature. "It appeared during the course of the greatest revolution of life the earth has ever seen—a revolution that had been in progress about 10,000,000 years before Barylambda appeared on the scene. This revolution was the transition from the age of reptiles to the age of mammals, which was ushered in by the dramatic and world-wide extinction of the dinosaurs and other giant reptiles that had dominated land and sea. At the beginning of this epoch the mammals were small to medium in size. Once they had succeeded to dominance, however, diversification and specialization along many lines went on rapidly, resulting finally in

the animal world we know today. One line of specialization was the acquisition of large size. This evolutionary trend especially characterized various orders of the great hoofed mammal stock, exemplified among living animals such as elephants, rhinos and hippos. These were preceded by a great variety of extinct groups of which Barylambda and its contemporaries were the earliest.

"Barylambda stood some four feet high, had an overall length of about eight and a half feet, and its width across the hips was almost equal to three-quarters of its height. Its bones were extraordinarily massive, indicating the possession of immense muscular power. The head was small in comparison to the size of the body. It had a long, large tail, flattened somewhat from side to side. It was found under conditions which indicate that at the time of its life this part of Colorado was a broad flood-plain. Rivers and streams from the Rocky Mountains evidently meandered back and forth across the plain, the climate was warm, and the vegetation was heavy. Barylambda was well-fitted for such an environment — its strong body was adapted to forcing a way through the tangled vegetation, and its teeth indicate it was vegetarian in diet. Its broad spreading five-toed feet supported its great weight well on soft, treacherous muddy ground, and its large compressed tail suggests that it was a capable swimmer."

Geology Term Topic

THE FIELD WORK

John Dowler

'Twas the morn after Christmas,
A wild, snowy day;
With burlap and hammer
I now make my way
Down a rocky stone canyon
In search of some rocks,
In a coat and two sweaters,
And three pairs of socks.

The rock walls are slippery,
The going is slow;
Your eyes travel down
To the place you must go.
You arrive at the bottom
With but a raw shin.....
You hitch up your belt,
And then you begin.

The Queenston is easy,
Medina is too,
But that gray stone, Oneida's
Far, far up from you.
You climb out a ridge
In search of some shale,
While you battle the snow
And a hundred mile gale.

You look for some fossils,
Discover a few;
The way you feel now
'Most anything would do.
At last you are finished,
And check what you've got—
And sigh, then begin
The climb to the top.

Your feet now are frozen,
Your fingers feel numb;
You've got all your rocks
But your work's just begun.
Then pack up your suitcase
With the stuff that you've got—
Then it's back to the college
With a bag full of rock.

You hope that the rocks
That you've found are O.K.
So that your teacher
Will pass you in May.
But there's still the term topic—
(And won't *that* be fun!)
Oh, brother, there's work yet,
Before you are done!

Editor's Note: We do not encourage contributions of poetry but the above written by a Muhlenberg College student, may please many of our readers. Mr. Dowler's term topic was "The Geology of the Genesee Gorge". The gorge is in southwestern New York.

SOUTHERN CALIFORNIA LOCALITIES

By JACK SCHWARTZ

656 South Hendricks Ave., Los Angeles, Calif.

2. Lake Malibu

An area overlooked by a great many Southern California mineral collectors is the rich mineral country around Lake Malibu. The writer has spent many interesting days in this vicinity resulting in a collection of cherished specimens.

One of the best spots in this vicinity is the privately owned land of the movie studios, barb-wired, and only accessible to the mineralogist by applying for a pass at the office of the Paramount studios near the lake.

The writer has in his collection, part of a geode, that when discovered by him near Lake Malibu, was three feet long and about one foot in diameter with quartz crystals up to one-half inch wide and one inch long. Other quartz geodes are common here, some of blue agate and others with banded agate. The greatest find of the writer and Mr. Sydney Dennis, was a geode containing foliated crystals of calcite, sitting right on top of the quartz crystals.

One hill in this movie property is studded with seams of analcime crystals. Careful manipulation may yield groups of these colorless crystals, many larger than three-eighths of an inch. The writer has seen a faceted gem cut from one of these crystals.

Natrolite is very common here, being found in compact nodules. Most of the specimens are hard and subsequently take a fine polish. Some are found hollow and make fine natrolite geodes with their square-cut crystals.

Calcite has been taken in various forms. Cleavages in chalcedony, in quartz, and adhering to natrolite were found by the author. The writer also has in his collection etched, pyramid-shaped calcite crystals that were collected here by Mr. Jess Abernathy.

Small crystals of aragonite were taken in quartz nodules.

Another amazing find by the writer was a most unusual geode. About two feet in diameter and nearly round, this hollow contained stalactitic calcite covered with chalcedony and each stalactite was tipped with a pyramid-shape calcite crystal.

In the agate group one can encounter jasper-agate containing fossil rudistids, common jasper, banded agate, moss agate agatized wood (some with quartz crystals), and the most beautiful specimens of sagenitic agate that can be found. Various types containing colors of yellow, black, red and white can be found. The writer has seen some plume agate collected by Mr. Jess Abernathy that has yet to be beaten. Iris agate is also taken.

Grape chalcedony and other botryoidal forms along with geodes containing oil stains are common. Silicified wood is found, but not of cutting quality.

People living in the vicinity of Lake Malibu have fine collections of Indian arrowheads to show for their meanderings here. The writer has found several but in bad shape.

Taking the highway to the beach one will find millions of selenite crystals, sticking out of the clay roadcuts, dazzling in the sun.

(Malibu Lake is in Los Angeles County, about 30 miles from Hollywood. As the crow flies it is about 6 miles from the Pacific Ocean, but by car about 20).

Literature:
Schwartz, Jack.
1942. Only 45 Minutes from Hollywood. Mineralogist Mag. 10 (2) : 51, 61.

With Our Dealers

Through some error, the address of the popular West Coast magazine, *National Amateur Mineralogist*, has appeared as 322 Madison St., Kenmore, Wash. The correct address is 322 Madison St., *Seattle*, Wash. We are very sorry that this error appeared in ROCKS AND MINERALS.

American Jewels Corp. of Attleboro, Mass., are desirous of contacting amateur lapidaries. They have an attractive offer for them. See their ad in this issue.

O. C. Smith of Bell, Calif., was in New York City recently on a business trip. Incidently he has worked up a very good beam balance for specific gravity determinations. See his ad in the classified section of this issue.

Wyoming Minerals of Laramine, Wyo., have issued an attractive calendar for 1943 which they are distributing among their large number of customers. Are you on their mailing list?

Collectors' Tales

THIS HAPPENED IN NEW YORK!

Some few years ago when Mr. James G. Manchester was Chairman of the Excursion Committee of the New York Mineralogical Club, it was his habit to visit a locality a day or two prior to a Club trip to look the ground over. If good specimens were lacking he would bring a number of his duplicates to pass out to members so that their trip would not be a disappointing one.

On one occasion the Club held a trip to the pegmatite quarries at Bedford, N. Y., and Mr. Manchester brought with him a large number of his Bedford duplicates. Each specimen had a label fastened to it (tied with a string). These were placed on some large masses of rock (on the dump) and the members were told to help themselves. After the activities of the day were over and the collectors left for home, no one, it seemed, noticed that a number of the labelled specimens had been left behind.

Some few weeks later a group of out-of-state collectors, visiting the Bedford quarries for the first time, were truly amazed to pick up good specimens with labels attached. (There had been no rain in the meantime).

"Well!" said one amazed collector, "I have visited many localities in many states and collected a large number of specimens but this is the first time I had ever found minerals on a dump with labels attached. Can it be possible that superintendents of New York mines and quarries are so good to collectors that they label their minerals before throwing them away on the dumps?"

(One of the specimens found by the visiting collectors chanced to be brought to Mr. Manchester's attention who, recognizing his label, guessed immediately what had happened.)

Clubs Affiliated With the Rocks and Minerals Association

ARIZONA

Mineralogical Society of Arizona
Geo. G. McKhann, Sec.. 909 E. Willetta Street, Phoenix.
Meets at the Arizona Museum in Phoenix on the 1st and 3rd Thursday of each month.

CALIFORNIA

East Bay Mineral Society
Miss Nathalie Forsythe, Sec., 1719 Allston Way, Berkeley.
Meets on the 1st and 3rd Thursdays of each month (except July and August), at 8:00 p.m., in the Lincoln School Auditorium, 11th and Jackson Sts., Oakland.

Northern California Mineral Society, Inc.
L. M. Demrick, Sec., 424 Ellis St., San Francisco.
Meets on the 3rd Wednesday of the month at the Public Library in San Francisco.

Pacific Mineral Society
Mrs. Maude Oke, Sec., 9115 S. Harvard Blvd., Los Angeles.
Meets on the 2nd Friday of each month at 6:30 p.m., at the Hershey Arms Hotel, 2600 Wilshire Blvd., Los Angeles.

Southwest Mineralogists
Dorothy C. Craig, Corres. Sec., 4139 S. Van Ness Ave., Los Angeles.
Meets every Friday at 8:00 p.m., Harvard Playground, 6120 Denker Ave., Los Angeles.

COLORADO

Canon City Geology Club
F. C. Kessler, Sec., 1020 Macon Ave., Canon City.
Meets on the 1st and 2nd Saturdays of each month at 9:00 a.m. in the High School Building, Canon City.

Colorado Springs Mineralogical Society
Mrs. Helen S. Caldwell, Secretary, 221 N. 14th, Colorado Springs.
Meets usually at the Lennox House, Colorado College Campus, Colorado Springs, on the 2nd Monday, of each month at 7:30 p.m.

CONNECTICUT

Bridgeport Mineral Club
Miss Georgianna Seward, Sec., 2859 Main St., Bridgeport.
Meets in the Bridgeport Public Library on the 3rd Monday of the month.

Mineralogical Club of Hartford
Frank P. Rockwell, Secretary, 88 Fern St., Hartford
Meets the 2nd Wednesday of each month, at 8:00 p.m., at 249 High St., Hartford.

New Haven Mineral Club
Mrs. Lillian M. Otersen, Sec., 16 Grove Place, West Haven.
Meets on the 2nd Monday of the month at the Y. W. C. A. on Howe St., New Haven.

IDAHO—OREGON

Snake River Gem Club
Mrs. A. Ingraham, Sec., Box 714, Ontario, Ore.
Meets alternately in Payette, Idaho, and Ontario, Oregon, (two small cities on the Snake River) on the 3rd Tuesday of every month.

ILLINOIS

Junior Mineral League
William Dacus, Sec., Morgan Park Junior College, 2153 W. 111th St., Chicago.

MAINE

Maine Mineralogical and Geological Society
Miss Jessie L. Beach, Sec., 6 Allen Avenue, Portland.
Meets last Friday of the month at 8 p.m., at the Northeastern Business College, 97 Danforth Street, Portland.

MARYLAND

Natural History Society of Maryland
2103 N. Bolton Street, Baltimore.
Office hours, Tuesdays and Fridays, 10:00 a.m. to 5:00 p.m.

MASSACHUSETTS

Boston Mineral Club
Mrs. Grace G. Dearborn, Sec., 40 Mt. Vernon St., Cambridge.
Meets on the 1st Tuesday of the month at 8:00 p.m., at the New England Museum of Natural History, 234 Berkeley St., Boston.

Connecticut Valley Mineral Club
Mary E. Flahive, Secretary, 96 South St., Florence
Meets on the 1st Tuesday of each month at 8 p. m. at various institutions in the Connecticut Valley.

MISSOURI

National Geologist Club
Mrs. D. P. Stockwell, Pres., Mt. Olympus, Kimmswick.

NEVADA

Reno Rocks and Minerals Study Club
Mrs. Rader L. Thompson, Sec., Box 349, R2, Reno.
Meets on the 1st Wednesday of each month, at 7:30 p.m., at the Mackay School of Mines, Reno.

Western Nevada Mineral Society
Miss Helen Griffing, Sec., 231 Mary St., Reno.
Meets on the 2nd Wednesday of each month at 7:30 p.m., at the State Bldg., Reno.

NEVADA

Mineralogical Society of Southern Nevada
Paul Mercer, Acting Secretary, Bureau of Mines, Boulder City.
Meets on the 2nd Monday of each month at Las Vegas High School and on the 4th Monday of each month at Boulder City High School—both meetings at 8:00 p.m.

NEW JERSEY

Newark Mineralogical Society
Louis Reamer, Secretary, 336 Elizabeth St., Orange.
Meets on the 1st Sunday of the month at 3 p.m. at Junior Hall, corner Orange and North 6th Streets. Newark.

New Jersey Mineralogical Society
G. R. Stilwell, Sec., 1023 W. 5th St., Plainfield.
Meets on the 1st Tuesday of the month at 8 p.m. at the Plainfield Public Library.

NEW MEXICO

New Mexico Mineral Society
R. M. Burnet, Sec.-Treas., Carlsbad.

Society of Archaeology, History and Art
Carlsbad.

NEW YORK

Chislers, The
Miss Evelyn Waite, Sponsor, 242 Scarsdale Road, Crestwood, Tuckahoe.

Queens Mineral Society
Mrs. Edward J. Marcin, Sec., 46-30—190th Street, Flushing.
Meets on the 1st Thursday of the month at 8 p.m. at 8501 - 118th St., Richmond Hill.

OKLAHOMA

Oklahoma Society of Earth Sciences
W. P. Smiley, Sec.Treas., 229 W. Jefferson Street, Mangum.
Meets on the 2nd Tuesday of each month, at 7:30 p.m., at the Historical Museum, Mangum.

PENNSYLVANIA

Thomas Rock and Mineral Club
Mrs. W. Hersey Thomas, Pres., 145 East Gorgas Lane, Mt. Airy, Philadelphia.
Meets on the 3rd Friday of each month, at 8:00 p.m., at the home of its president, Mrs. Thomas.

VERMONT

Mineralogical Society of Springfield
Victor T. Johnson, Sec., 11 Elm Terrace, Springfield.
Meets on the 3rd Wednesday of each month at 8:00 p.m. at the homes of members.

WASHINGTON

Gem Collectors Club
Mrs. Lloyd L. Roberson, Sec., 522 North 70th Street, Seattle.
Meets on the 1st and 3rd Tuesday of each month (except during the summer) at 8:00 p.m., at the Y. M. C. A.

Washington Agate and Mineral Society
Monroe Burnett, Sec., 802 S. Central St., Olympia.
Meets on the 1st Monday of the month, at 7:30 p.m. at the home of some member.

WISCONSIN

Wisconsin Geological Society
Milwaukee Public Museum, Milwaukee, Wisc.
Meets on the 1st Monday of each month at 8:00 p.m., at the Public Museum in Milwaukee.

Merry Christmas and a Happy New Year to all our readers and friends!

May 1943 bring to this war-wearied world an end of all hostilities and the beginning of a new peace which shall be as enduring as the Rock of Gibraltar. Let us all strive to get on God's side and not waste our time while on earth in petitioning Him to get on ours.

CLUB AND SOCIETY NOTES

New York Mineralogical Club

American Museum of Natural History, New York, N. Y., Wednesday, October 21, 1942. Convened: 8:15 P.M. Attendance: 51.

The following were elected to honorary membership by unanimous vote of the members attending: Sir William Lawrence Bragg, Dr. Leonard James Spencer, Mr. Herbert P. Whitlock.

Professor Bragg's outstanding contribution has been in the field of X-Ray Crystallography. Dr. Spencer was Keeper of Minerals at the British Museum and has made many contributions to descriptive mineralogy. Mr. Whitlock is best known for his publications on gems and the crystallography of Calcite. He was Curator of Gems and Minerals at the New York Museum of Natural History from 1918 thru 1940.

Mr. Sampter read a report of last spring's field trip and Mr. Trainer announced that the fall excursion would be to one of the dumps of the Delaware Aqueduct in Yonkers, N. Y.

The auditing committee made a favorable report.

Minutes of the May and October Directors' meetings were read.

Mr. Taylor reported that the following members are now in the armed service:

Joseph Cilen	Frank A. Lewis
Martin Ehrmann	F. J. Poestkoke
Ross L. Huntington	Leo N. Yedlin
F. Kuthmayer	Purfield Kent
Max Johl	

The balance of the meeting was devoted to talks by the members on their summer collecting experiences.

Mr. Morgan exhibited large calcite crystals, some twinned, and large apophyllite crystals from Prospect Park, N. J.; amber from Parlin, N. J.; carnellian from Berkeley Heights, N. J.; pyrite and marcasite from South River, N. J.; purple apatite crystals from Portland, Conn.

Mr. Sampter exhibited various Maine minerals, among them being excellent beryls and tourmalines, as well as amethyst from Deer Hill.

Mr. Northup exhibited magnetite in prochlorite, some twinned, from Chester, Vt.; white prehnite and calcite crystals from Summit, N. J., and ferruginous quartz from Haledon, N. J.

Mr. McKown showed good feldspar crystals from Bedford, N. Y., and Branchville, Conn., as well as red serpentine from Port Chester, N. Y.

Mr. Maynard exhibited two large quartz crystals from Brazil, one with 50 or more phantoms.

Mr. Marcin spoke of collecting clevelandite at Amelia, Va.; nelsonite - ilmenite from Nelson County, Va.; manganese ores from Crimora, Va.; autunite from South Glastonbury, Conn.; pseudo-malachite from North Arlington, N. J.; and vivianite crystals from Mullica Hill, N. J.

Mr. Trainer displayed a specimen of quartz and epidote pseudomorphous after large garnet crystals.

Dr. Pough reported on the anniversary meeting of the Philadelphia Mineralogical Society at which he represented our club.

The meeting was adjourned at 9:25 P.M.

M. A. Northup, Secretary.

New Jersey Mineralogical Society

The mineral show scheduled for the fall of 1942 has been postponed, due to war, to 1943.

At the November meeting a new feature was inaugurated by the club which met with a warm response. A subscription to ROCKS AND MINERALS is to be given away at each meeting as a door prize. This is to encourage a larger and more prompt attendance. The winner of the November door prize was Mr. Lyle Cooper of Rahway, N. J.

The officers for 1942-1943 are:

President—Joseph D'Agostino
Vice President—Dr. S. S. Cole
Vice President—O. Ivan Lee
Secretary—G. R. Stilwell
Asst. Secretary—Miss H. M. Hageman
Treasurer—O. B. J. Fraser
Asst. Treasurer—Miss E. M. Heusel
Curator—J. M. Dupont

Newark Mineralogical Society

The 26th annual meeting of the Newark Mineralogical Society was held on Sun., Nov. 1, 1942, in the Brewster Room, Junior Hall, 468 Orange St., Newark, N. J. The following officers were elected:

President—William Broadwell
Vice President—George Carpenter
Treasurer—Leonard Morgan
Secretary—Louis Reamer
Trustee—Mr. William Bather

The program for the afternoon was a lecture on "Atomic Structure of Minerals", by George R. Werner.

Ernest A. Maynard is to be the speaker for the December meeting. His subject will be "Rambling through the West with pick and camera", illustrated with 200 Kodachrome slides.

Louis Reamer, Sec'y.

Southwest Mineralogists

The Southwest Mineralogists of Los Angeles, Calif. have incorporated as a non-profit organization under the laws of the State of California.

The club held its 6th annual exhibit of minerals and lapidary art at the Harvard Playground on Oct. 17th and 18th. The mineral exhibits were judged by Mr. Victor M. Arcinega and the lapidary work by Mr. James C. Arnold.

The club now meets at the Harvard Playground, 6120 Denker Ave., Los Angeles.

Dorothy C. Craig,
Corres. Sec'y.

Northern Ohio Guild

A regular meeting of the Northern Ohio Guild of the American Gem Society was held on Thurs., Nov. 19th, 1942, at Western Reserve University, Cleveland, Ohio. The program consisted of a lecture on zircon (December's birthstone) by Dr. Donner of the University, a 10-minute talk on topaz by Harry Erickson, evaluation of a selection of zircons by individual members, and a study session for students.

The Guild conducts a laboratory session for those desiring the actual experience of identifying gems by means of various instruments used by jewelers.

Bibliographical Notes

Osteology of Polyglyphanodon, an Upper Cretaceous Lizard from Utah: By Charles Gilmore.

A number of specimens of this heretofore undescribed member of the lizard family were discovered in 1937 and 1938 by the Smithsonian Paleontological Expedition to Central Utah. This paper describes the specimens found. pp. 229-265 3 pls. Pub. No. 3148

New Upper Cambrian Trilobites: By Charles E. Resser.

A large number of new species of trilobites from many localities in the United States and Canada are described in this paper.

136 pp. 21 pls. Pub. 3693

Both publications issued by the Smithsonian Institution, U. S. National Museum, Washington, D. C.

Minerals of New Mexico: By Stuart A. Northrop.

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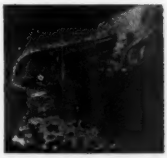

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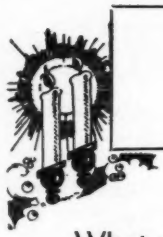

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